(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 14 July 2005 (14.07.2005)

PCT

(10) International Publication Number WO 2005/064679 A1

- (51) International Patent Classification⁷: H01L 23/544, G03F 7/20
- (21) International Application Number:

PCT/IB2004/052724

- (22) International Filing Date: 9 December 2004 (09.12.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

03104956.2

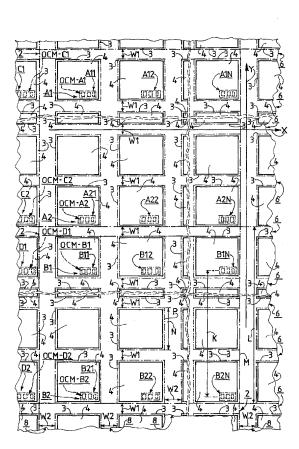
23 December 2003 (23.12.2003) EI

- (71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): SCHEUCHER, Heimo [AT/AT]; Triester Strasse 64, A-1101 Vienna (AT).

- (74) Agents: RÖGGLA, Harald et al.; Philips Intellectual Property & Standards, Triester Strasse 64, A-1101 Vienna (AT).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: WAFER WITH OPTICAL CONTROL MODULES IN IC FIELDS



(57) Abstract: In a wafer (1) with a number of exposure fields (2), each of which exposure fields comprises a number of lattice fields (3) with an IC (4) located therein, two groups (5, 7) of saw paths (6, 8) are provided and two control module fields (A1, A2, B1, B2, Cl, C2, D1, D2) are assigned to each exposure field, each of which control module fields contains at least one optical control module (OCM-Al, OCM-A2, OCM-B1, OCM-B2, OCM-Cl, OCM-C2, OCM-D1, OCM-D2) and lies within the exposure field in question and comprises a plurality of control module field sections (A11, A12..... AIN and A21, A22......B1N and B21, B22,..... B2N and C1N and C2N and D1N and D2N) and is distributed among several lattice grids (3), wherein each control module field section (A11 to D2N) is located in a lattice field and contains at least one control module component (10,11,12,13,14,15,16,17,18).



WO 2005/064679 A1

WO 2005/064679 A1



FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

with international search report